

Department of Ecology

Water Quality Assessment for Washington

Public Review

March 23 – May 16, 2015





Agenda for Today

- Overview of the WQ Assessment
- How the Assessment is developed
 1. Listing policies
 2. Collecting data to be used
 3. Water Quality Standards baseline
 4. 303(d) List & TMDLs
- What this Assessment is telling us
- Change in the listing segmentation system
- Tools to review Assessment results
- Hands on

What is the Water Quality Assessment for Washington?

- *It's a comprehensive assessment of the quality of Washington's waters*
- *It gives the ability to better track when waters are getting cleaner or dirtier.*
- *It allows us to set priorities for protecting and improving water quality used for swimming, fishing, fish habitat, and drinking water.*
- *It meets requirements in the Clean Water Act by providing an "Integrated Report" on Water Quality to EPA.*



WQ Assessment Categories

Water quality assessment results are placed into five different categories.

All will be submitted to EPA and the public, but only impaired listings requires EPA approval.

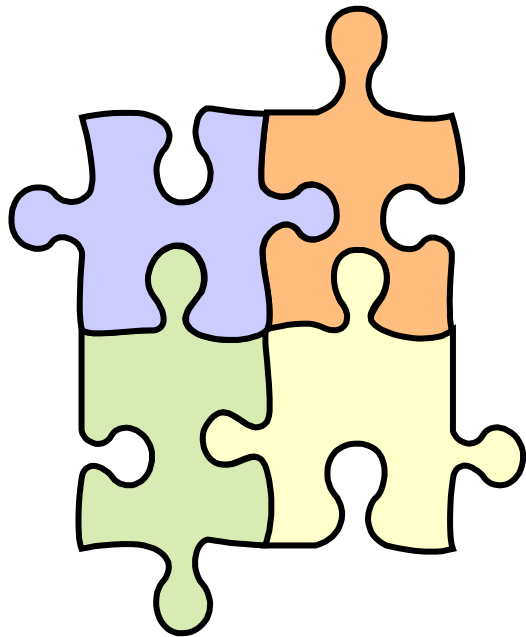
Category 1: Meets Tested Standards	Not impaired, or not known to be impaired No TMDL required
Category 2: Waters of Concern	
Category 3: Insufficient Data	
Category 4: A--Has a TMDL B--Pollution Control Plan C--Nonpollutant	Impaired TMDL/Cleanup plan in place
Category 5: The 303(d) List	Impaired TMDL/Clean up Plan required

What does EPA have to do with all this?

- *EPA has a responsibility to make sure all states are meeting requirements of the Clean Water Act.*
- *The Clean Water Act requires that states submit a status of their waters (called the 305(b) Report), as well as a list of Polluted Waters (the 303(d) list). This Assessment is an “Integrated Report that meets these two requirements.*
- *EPA must approve the Impaired Water List.*
- *States are then responsible for working to clean up those polluted waters.*



How does Ecology put the Assessment together?



1. We develop **written policies** to help determine when a water is polluted or showing signs of pollution.
2. We compile all available **water quality data** we can, from many different groups
3. We assess the data by comparing it to existing **water quality standards** to see if we have problems.
4. Waters on Category 5, the 303(d) List, require a Total Maximum Daily Load, or TMDL, to bring waters back into compliance with the standards.

1. Written Agency Policies for Conducting the WQ Assessment

■ **Water Quality Policy 1-11**

- Chapter 1: Assessment of Water Quality for the Clean Water Act Sections 303(d) and 305(b) Integrated Report

- Chapter 2: Ensuring Credible Data for Water Quality Management

Most recent policy was updated through a public process in 2012.

Where does the data come from?



2. Compiling Water Quality Data to Use for the Assessment

Government Agencies

Tribes

Federal Government

Academic Institutions

Businesses

Non-Profit Organizations

Volunteer Monitoring

Assess data using Water Quality Standards:

This identifies waterbodies with possible pollution problems according to pollution limits.

Ecology's Environmental Information Management (EIM) system is the key repository for data used in the WQ Assessment.



3. Water Quality Standards- Basis for Comparison of Data

- WAC 173-201A: Surface Water Quality Standards for Washington
 - Standards set limits on pollution in lakes, rivers and marine waters in order to protect beneficial uses, such as salmon habitat, swimming and fishing. Define goals for a waterbody by:
 1. Assigning designated uses,
 2. Setting criteria to protect those uses, and
 3. Establishing provisions to protect waterbodies from pollutants.

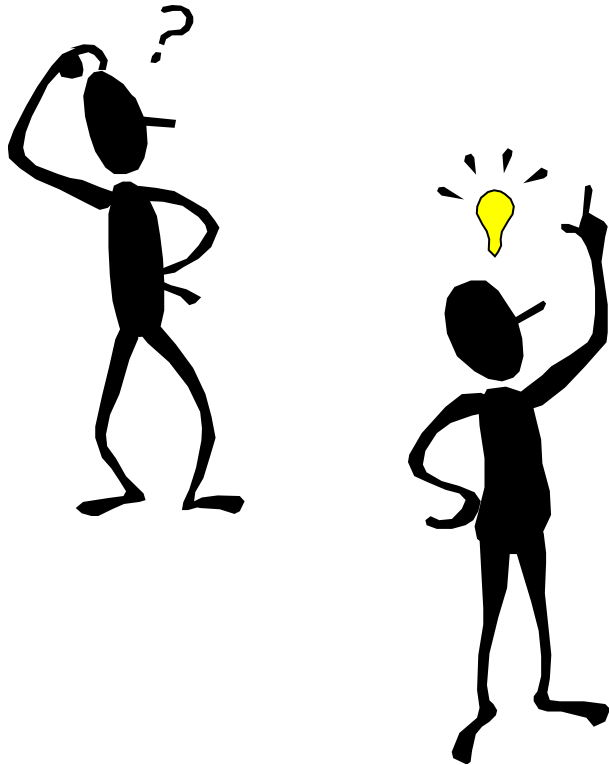
4. 303(d) Listings (Cat. 5)—the TMDL “To Do” List

- TMDL--a scientific study of a watershed, with activities identified to reduce pollution (Category 4A)
- A Pollution Control Program is in place to solve pollution problems (Category 4B).

GOAL: to clean up waters and bring them back into compliance with WQ standards (Category 1)



Why are you asking me to get involved?



We want
your
feedback!



How can I help in this Review?

Review waters you are familiar with and provide comments where you:

- **See problems with the information associated with a water quality assessment listing.**
- **Disagree with the assessment results.**
- **Have data or information on the water body to support your finding to correct the assessment.**
 - **Data must be within the assessment period considered for this assessment 2001 – 2010**
 - **More recent data will be assessed in the next assessment which Ecology plans to begin this year – we will send out a “call for data” submittals at that time**



Draft WQ Assessment: Background Information

- **Last Assessment focused on marine waters; approved by EPA December 2012**
- **Fresh water Assessment began Summer 2011**
 1. Ecology received data submittals, then processed and compiled the data to assess.
 2. The WQA policy (Policy 1-11) was revised through a public review process and finalized in July 2012
 3. Data was assessed by parameter using the WQ Standards and the WQ Assessment Policy methodologies, finishing in September 2014.



Draft WQ Assessment: Factoids

- # of data records: >4 million
- # of water quality listings: > 31,000
(28% increase from 2012 Assessment)
- Transitions freshwater segments to reach
based segments based on the National
Hydrography Dataset (NHD)

Some Listing Comparisons with 2012 Water Quality Assessment

Category	2015-Draft Assessment	Percent Increase from 2012 Assessment
Category 1 <i>Meets tested standards</i>	5,491	36%
Category 2 <i>Water of Concern</i>	3,201	13%
Category 4 <i>TMDL or other</i>	4A & 4B=1,939	4A & 4B=9%
Category 5 <i>303(d)</i>	3,847	43%
Overall TOTAL	23,863	31%

*Category 3-Insufficient data to make a determination, increased 38%



Reasons for Increase in Listings from Last Assessment

- Improved monitoring (more data available)
- Updates to water quality standards or criteria (temperature)
- The effectiveness of pollution control programs. (Cleanup plans working and data showing improvement)

Number of Category 5- 303(d) Listings- by Pollutant

Proposed Category 5 Listings	2015-Draft Assessment	Percent of Proposed Category 5 Listings
<i>Temperature</i>	1187	31%
<i>Dissolved Oxygen</i>	852	22%
<i>Bacteria</i>	597	16%
<i>pH</i>	536	14%
<i>All other Conventional Parameters</i>	178	5%
<i>Toxics-human health criteria</i>	387	10%
<i>Toxics-aquatic life</i>	108	3%
TOTAL	3,847	100%



Next Steps in the Assessment

- After the public review ends on May 15th, we will review all comments received and make changes as necessary to the Assessment.
- The final results will be submitted to EPA for review and approval.
- After EPA takes an approval action, we will take immediate steps to start the next WQ Assessment.